

EVENT-RECORDER FOR TRANSMITTING AND STORING
ELECTRONIC SIGNATURE DATA

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ABSTRACT OF THE DISCLOSURE

10 An electronic event recorder for attachment to a vehicle is provided which can broadcast encrypted signature and data, thereby leaving behind an electronic version of a "fingerprint" in the event of an accident or traffic violation. The fingerprint, captured by an external data acquisition system or another vehicle so equipped, provides a history of events related to the vehicle. The event
15 recorder is preferably integrated on a smart card and housed in a tamper proof casing. In a first mode of operation, monitoring stations along the roadways periodically send an interrogation signal, such as when radar detects that the vehicle is speeding. Upon receiving the interrogation signal
20 the smart card transmits the vehicle's signature information to the monitoring station where it is time and date stamped along with the speed of the vehicle. In a second mode of operation, when a sensor detects a sudden or violent acceleration or deceleration, such as occurs during a
25 collision, a smart card mounted in each car will exchange signature information automatically. This is particularly useful when the collision occurs in a parking lot when one of the hit vehicles is typically unattended.